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WAR FOOD ADMINISTRATION

Office of Production

THE CATTLE SITUATION IN 1944

Prepared at the request of the Extension Service by Charles A. Burmeister, Chairman, Meat Animal Goal Committee, War Food Administration, for use as background material by extension specialists and other field representatives.

The upward trend in livestock production during the last 5 years brought cattle, hog, and poultry numbers to record levels at the beginning of 1944. Compared with the 10-year average (1932-41), live-weight hog production in 1943 was up 73 percent; chickens, 39 percent; and cattle, 25 percent. Cattle numbers at the end of the year totaled more than 82 million head and exceeded the cyclical peak reached in 1934 by 8 million head and that in 1918 by more than 9 million. Since 1939, numbers have been increasing at a rate of more than 3 million head annually.

During 1942 and 1943, livestock and poultry production increased at a faster rate than feed production, notwithstanding that crop yields were above average, consequently, the large feed reserves accumulated during the years following the droughts of 1934 and 1936 were mostly exhausted before the end of the winter of 1943-44. Livestock numbers and feed supplies are now seriously out of balance, and considerable readjustments are necessary to get them into the relationship that is most desirable for the national agricultural program.

With favorable weather in 1944, farmers may be expected to increase feed production somewhat over 1943, although they will be greatly handicapped by the general shortage of labor and needed farm machinery and by the delayed planting season. But even with some increase in feed production, the only feasible way of balancing feed resources and livestock is for producers to reduce livestock numbers to a level which will insure them a greater margin of safety in carrying on their operations. This is especially true in the event crop yields and pasture and range conditions should fall below average because of unfavorable weather.

Hog and poultry production is now being reduced from the high levels of 1943. Fewer sows will be farrowed this year and fewer chicks will be hatched. Downward adjustments in cattle production are feasible only by reducing cattle numbers through increased slaughter. Since 1938 when the present cattle number cycle started, the yearly calf crop has exceeded the combined total of slaughter and death losses of cattle and calves, thus resulting in an annual increase in cattle numbers. In six years, cattle numbers have increased 17 million head. Reducing numbers involves reversing this relationship by having slaughter and death losses exceed the calf crop. (See Table, Page 7)

### National and Regional Trends in Cattle Production

The yearly production of cattle, liveweight basis, from 1909 to 1943 is shown in Figure I, for the entire country and the two large regions comprising the 17 western states (the Plains, Mountain, and Pacific States) and the 31 states east thereof. Production during these 35 years ranged from 12.1 billion pounds in 1927 to 18.4 billion in 1943. From 1911 to 1917, the trend was upward followed by a decline until 1920. From that year until 1931 production held within a narrow range at a fairly low level. A marked increase in 1932 and 1933 was followed by a decrease in 1934 and 1935 resulting because of drought and short feed supplies. Since 1938 the trend has been sharply upward, reaching the highest level of record last year.

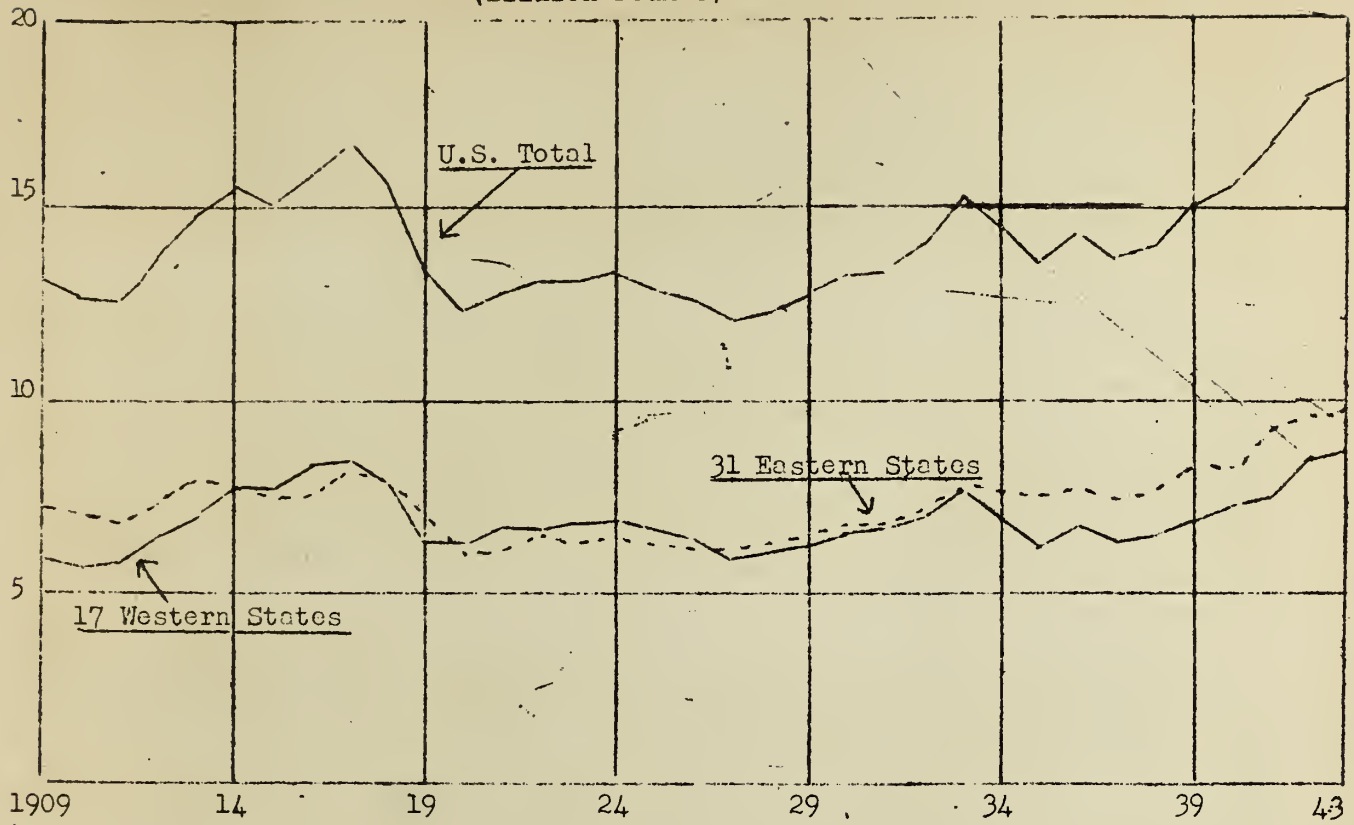
From 1914 to 1933, production was about equally divided between the 17 western states and the other 31 states. Prior to 1914, the 31 eastern states produced the larger share, and since 1933 have considerably exceeded the western states in output, as they were much less affected by the drought conditions of 1934 and 1936.

Variations in liveweight production in relation to numbers of cattle on farms at the beginning of each year are shown in the lower section of Figure I. Production per animal on farms rose from 1910 to 1913, then dropped sharply to 1920 and has since been increasing as the industry has gradually adjusted to a basis of more rapid turnover by marketing cattle at younger ages.

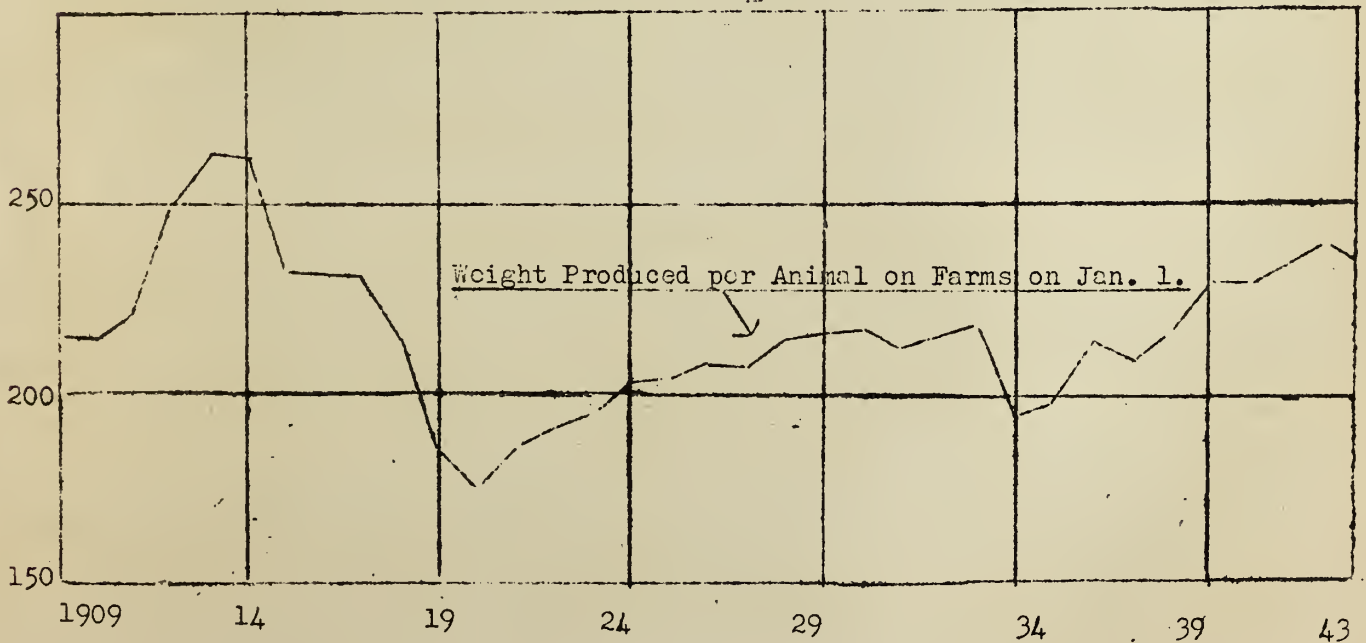
### Cattle Production and Slaughter Goals

In the fall of 1943, State Agricultural Goal Committees, guided by appraisals of feed resources and carrying capacity in their respective states, recommended reductions in cattle numbers that would bring the national total to slightly below 77 million head by the end of 1944, or about 6.5 percent less than the 82.2 million now estimated on hand at the beginning of the year. To achieve this reduction in 1944 would require a total slaughter this year of 36.5 million cattle and calves, or about 9 million more than were slaughtered in 1943. It is probable that because of labor shortages, slaughtering facilities could not handle so large a number, even if a considerable part of the cattle usually marketed in the fall months were sold earlier so as to reduce the seasonal peak which normally occurs in October. It is unlikely also that anything short of a drought could influence producers to sell so many cattle and calves for slaughter in 1944.

**Fig. 1. Yearly Liveweight Production of Cattle and Calves, 1909-1943**  
(Billion Pounds)



Pounds





Slaughter of cattle and calves during the first five months of this year totaled approximately 12.2 million head and was at a rate indicating a yearly total of about 31.5 million head, assuming that the seasonal pattern for the year would be about average. If, however, the distribution of slaughter through the year should be like that in those years when the proportion in the second six months was exceptionally large, the yearly total could reach 35 million. Assuming an average seasonal pattern and 35 million head to be the desired slaughter goal, the number slaughtered during the first 5 months was short by approximately 1,150,000 cattle and 325,000 calves.

Conditions now with respect to cattle prices, feed supplies, range conditions, meat rationing, and the general attitude of producers, as compared with 1943, are such as to encourage much larger marketings of cattle this year than last. Slaughter, therefore, probably will continue above last year's level but whether it will exceed 31 to 32 million head will depend on what producers generally will do towards culling their herds more closely than they have in recent years. A slaughter of 32 million cattle and calves in 1944 would halt the upward trend in numbers and probably result in a reduction of nearly a million head. Any increase beyond this total would be reflected in an equivalent decrease in numbers.

During most of the period since the 1936 drought, and especially in 1941 and 1942, grazing conditions generally were unusually favorable and the acreages of hay and pasture were larger than likely to be maintained under the wartime food production program. Unless there is a substantial increase in cattle slaughter in 1944 which will materially reduce cattle numbers in most sections, producers will be confronted with the risk that available feed supplies will be insufficient for maintaining cattle in good growing conditions.

An increase in cattle slaughter is needed to obtain the beef required for the war food program. Requirements for military use are especially large because beef is one of the most important items in the American soldier's diet. With smaller supplies of pork in prospect after mid-summer of 1944, more beef and veal will be needed for civilian use. In view of the unusually high level of civilian purchasing power and the increased demand for all meats, conditions now are unusually favorable for cattlemen to adjust numbers to feed and range carrying capacity by marketing unusually large numbers for slaughter. The inevitable adjustment will be more difficult to make if postponed to a period when the demand for meat is reduced and the feed situation becomes more acute.

#### Problems of Adjusting Cattle Numbers

Obtaining a better adjustment between cattle numbers and feed and range resources is primarily a problem of increasing the slaughter of cows and heifers that otherwise would be retained for breeding. At least three-fourths of the total increase in numbers since 1938 has been in the stock. The general practice among cattlemen now is to sell most steers for slaughter before they are 3 years of age and a large proportion under two years. During the last war and in the early twenties many older steers were produced. Changes in the proportion of steers in the country at the beginning of each year to cows and heifers one year of age and over on farms a year earlier, are shown in Figure 2. The proportion dropped steadily from 22.3 steers per 100 head of cows and heifers in 1921 to 10.9 in 1935. It then increased to above 12 in 1938-40, and has since risen above 14, being 14.8 this year.

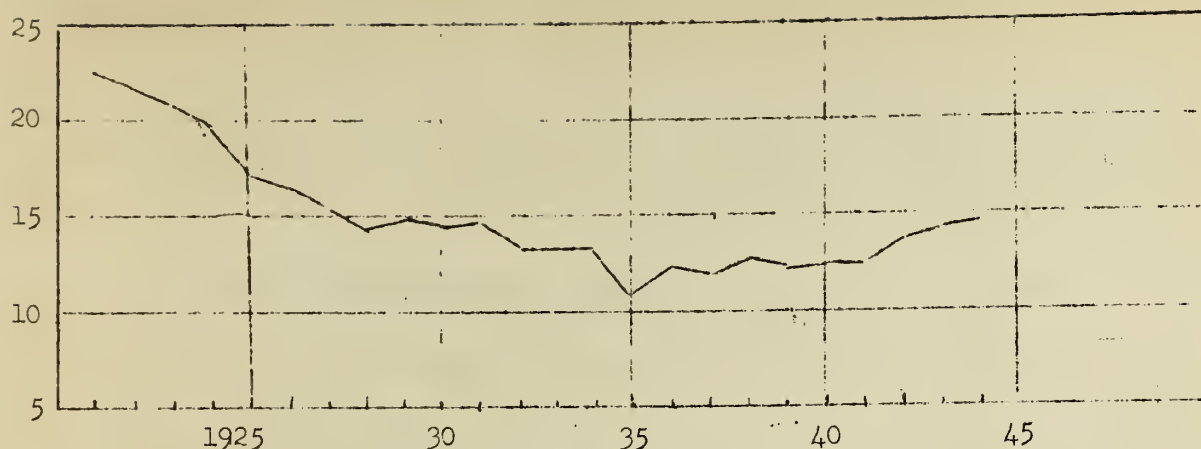


Fig. 2, Number of Steers on Farms Jan. 1 per 100 Cows and Heifers (One Year and Over) reported a Year Earlier, 1921-1944. Steer numbers in relation to cows and heifers decreased from 1921 to 1935, held about unchanged from 1936 to 1941, and increased slightly in the last 3 years.

Changes in cattle numbers from year to year are closely related to yearly changes in the slaughter of cows and heifers. (see Figure 3). The lower line in this chart represents the ratio of the number of cows and heifers slaughtered under Federal inspection each year to the total number of cows and heifers on farms at the beginning of the year, expressed as a percentage of the latter. The top line represents the number of cows and heifers and the middle line the number of other cattle, -steers, bulls, and calves, - on farms at the end of the year. In those years when the number of cows and heifers slaughtered under Federal inspection was the equivalent of more than 11 percent of such cattle on farms, cattle numbers usually showed a decrease at the end of the year. In the years when the ratio was below 11 percent, numbers usually increased. This variation in the percentage of cows and heifers slaughtered each year accounts largely for the cyclical changes in cattle numbers. After rising in 1941 and 1942, the percentage of cows and heifers slaughtered in relation to the numbers of such cattle declined in 1943, and it has been relatively small thus far in 1944. To effect a reduction in cattle numbers this year, therefore, will necessitate obtaining a very large increase in cow and heifer slaughter during the remainder of the year.

#### Distribution of Goals by Classes of Cattle

To fill the urgent need for more dairy products during the war will require further increases in the number of milk cows. But the maximum number (about 28.2 million head) for which there will be feed and other facilities should be reached by the end of 1944, as the larger-than-usual number of heifers retained in 1942 and 1943 will then come into milk production. With less need for retaining so large a proportion of the dairy heifers and heifer calves for increasing the number of milk cows in 1945, more of them can be marketed for slaughter or used for increasing the rate of replacement in cows and thereby making the less productive cows available for slaughter. Thus under either alternative part of the total reduction in cattle numbers necessary to achieve the suggested goal can be obtained in dairy animals kept for milk without reducing milk production.

During the last 5 years many beef cows have been retained beyond their period of maximum usefulness. More cows than usual, therefore, should be culled out and sold for slaughter. If the number of cows were reduced, fewer heifers would be needed for replacements and fewer bulls would be needed.

If cattle numbers were reduced to about 78 million head by the end of 1944, the desired distribution by classes and age groups in 1945 compared with earlier years would be about like that shown in Table I.

Table I Suggested Number of Cattle and Calves on Farms January 1, 1945, by Classes, with Comparisons

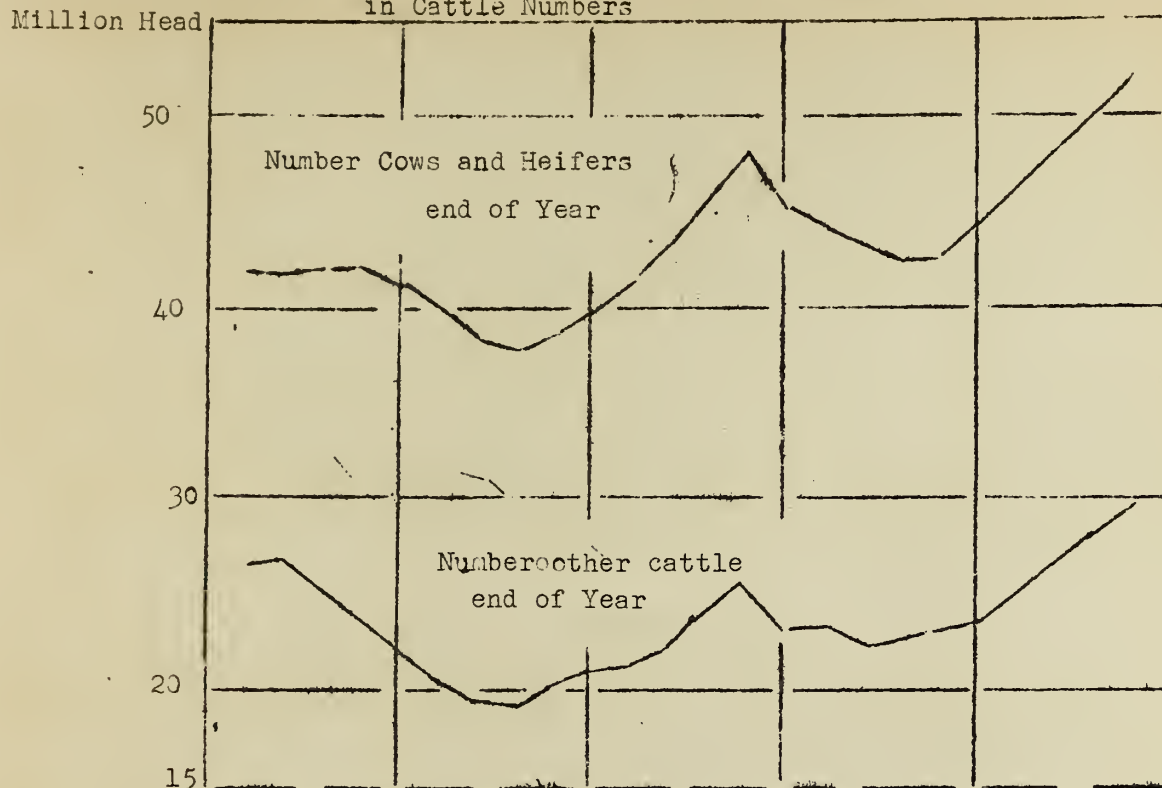
Class and Age Group	1934	1939	1941	1942	1943	1944	1945 Goal
Million of Head							
<u>Kept for Milk</u>							
Cows, 2 years	26.9	24.6	25.5	26.4	27.1	27.6	28.2
Heifers, 1-2 years	5.4	5.1	5.7	5.8	6.0	6.2	5.7
Heifer calves	5.7	5.9	6.2	6.6	6.0	7.0	6.2
Total	38.0	35.6	37.4	38.8	40.0	40.8	40.1
<u>Other Cattle (beef)</u>							
Cows, 2 years	12.7	10.0	11.2	12.1	12.9	13.7	12.0
Heifers, 1-2 years	3.7	3.1	3.8	4.0	4.4	4.8	4.4
Steers, 1 year	6.1	5.2	5.9	6.4	6.9	7.5	6.7
Bulls, 1 year	1.7	1.6	1.7	1.7	1.8	1.9	1.8
Other calves	12.2	10.6	11.5	12.2	13.1	13.5	13.2
Total	36.4	30.5	34.1	36.4	39.1	41.4	38.1
Grand Total	74.4	66.0	71.5	75.2	79.1	82.2	78.2

To obtain the distribution by classes and age groups indicated in Table I, the changes in numbers from 1934 and 1944 to 1945 would be as follows:

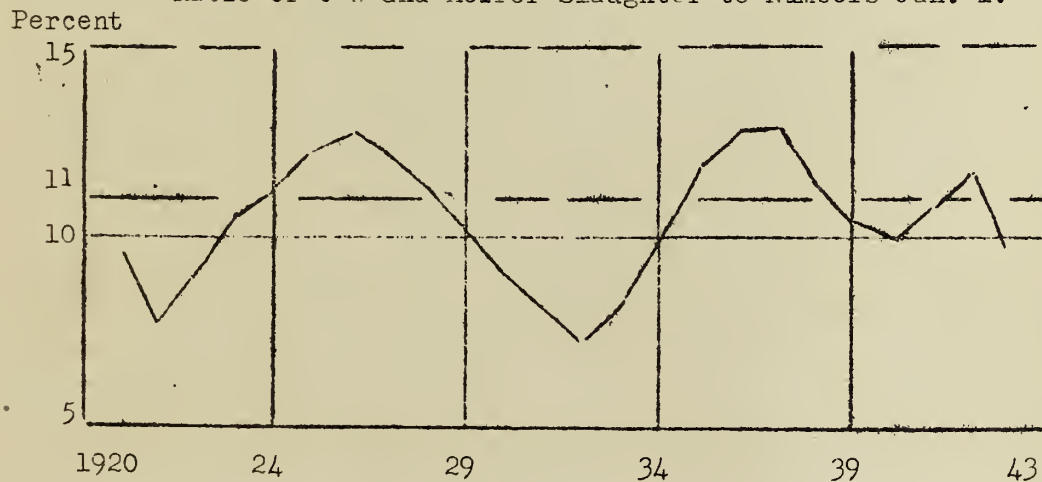
Class and Age Group	Change from 1934 to 1945		Change from 1944 to 1945	
	Increase	Decrease	Increase	Decrease
Milk cows . . . . .	1,300,000	- - -	600,000	- - -
Dairy heifers, 1-2 yrs.	300,000	- - -	- - -	500,000
Dairy heifer, calves	500,000	- - -	- - -	800,000
Total	2,100,000	- - -	600,000	1,300,000
Beef cows . . . . .	- - -	700,000	- - -	1,700,000
Beef heifers, 1-2 yrs.	700,000	- - -	- - -	400,000
Steers . . . . .	600,000	- - -	- - -	800,000
Bulls . . . . .	100,000	- - -	- - -	100,000
Other calves . . . .	1,000,000	- - -	- - -	300,000
Total	2,400,000	700,000	- - -	3,300,000
Grand total	4,500,000	700,000	600,000	4,600,000
Net Change	3,800,000	- - -	- - -	4,000,000



Fig. 3 Relationship of Cow and Heifer Slaughter to Changes in Cattle Numbers



Ratio of Cow and Heifer Slaughter to Numbers Jan. 1.



Yearly Calf Crop, imports, slaughter and other disappearance of cattle and Calves (Million head)

	1936	1937	1938	1939	1940	1941	1942	1943
Into Sight								
Calf Crop	28.2	28.0	27.8	28.8	29.8	31.1	32.9	33.1
Imports, Cattle and Calves	.4	.5	.4	.8	.6	.7	.7	.6
Total Number	28.6	28.5	28.2	29.6	30.4	31.8	33.6	33.7
Disposals								
Total Slaughter	25.9	25.6	24.1	23.8	24.1	25.7	27.7	27.6
Other disappearance	4.4	3.7	3.3	3.7	3.0	2.4	1.9	3.0
Total number	30.3	29.3	27.4	27.5	27.1	28.1	29.6	30.6
Net Change	-1.7	-0.8	+0.8	+2.1	+3.3	+3.7	+4.0	+3.1

The breeding herd represents the producing unit or capital plant investment of the cattle enterprise. Most cattlemen, therefore, are usually reluctant to reduce their scale of operations by disposing of breeding cattle so long as cattle prices are well maintained and the raising of calves promises to continue unusually profitable. Exceptionally high returns from the sale of calves and feeder cattle are an incentive to hold back breeding stock and expand herds. Hence, little reduction in cattle numbers can be expected when cattlemen think prices may continue to rise, unless droughts and feed shortages are so severe as to be an offsetting influence. This fundamental characteristic of the cattle business largely accounts for its difficulty to make the downward adjustments in size of herds needed to place the industry on a safer basis.

When cattlemen reduced their breeding herds in the early twenties, the motivating causes were the relatively low prices for cattle in comparison with those of competitive agricultural products, and the pressure to liquidate cattle loans which were then relatively large. The next period of decreasing numbers was from 1934 to 1937 when unusually severe drought conditions forced liquidation, which was accomplished largely through extensive Government purchases of cattle as a relief measure for the industry.

### Regional Situations

Increases in cattle numbers since 1939 have occurred in all of the major agricultural regions (see figures 4-8). Thus an adjustment problem is found in varying degrees in every region.

Since a large part of the cattle kept for beef, especially the breeding stock, are in the 17 Great Plains and Western Range States, much of the total reduction in this class of cattle, probably about 60 percent, would be in those States. In most of those States, especially the Great Plains and the Mountain States, where the operation of the cattle cycle is most pronounced, numbers now are near maximum carrying capacity under even the most favorable grazing conditions, and considerable reduction is needed to provide assurance of maximum beef output when less favorable grazing conditions recur. In the range States, where beefcattle production provides a way of utilizing the valuable forage resources found there, and where fluctuations in weather and feed supplies are somewhat extreme and thus increase the hazards of production, it is essential that assurance of maximum beef output be obtained by rates of stocking consistent with the carrying capacity of the range and the supplemental feed supplies that reasonably may be expected to be available. Otherwise, producers there are confronted with the risk of being forced to dispose of their cattle when they are far below average in condition, and when demand for beef is likely to be unfavorable.

The State goals suggested by the State Committees last fall indicate that some reduction is needed in all of the Great Plains and Western States. Generally, however, more reduction is suggested in South Dakota, Kansas, Oklahoma, Montana, Colorado, Wyoming, Oregon, Washington, and New Mexico than in other states in these regions.

Fig. 4. Number of Beef Cattle by Regions, January 1, 1930-1944

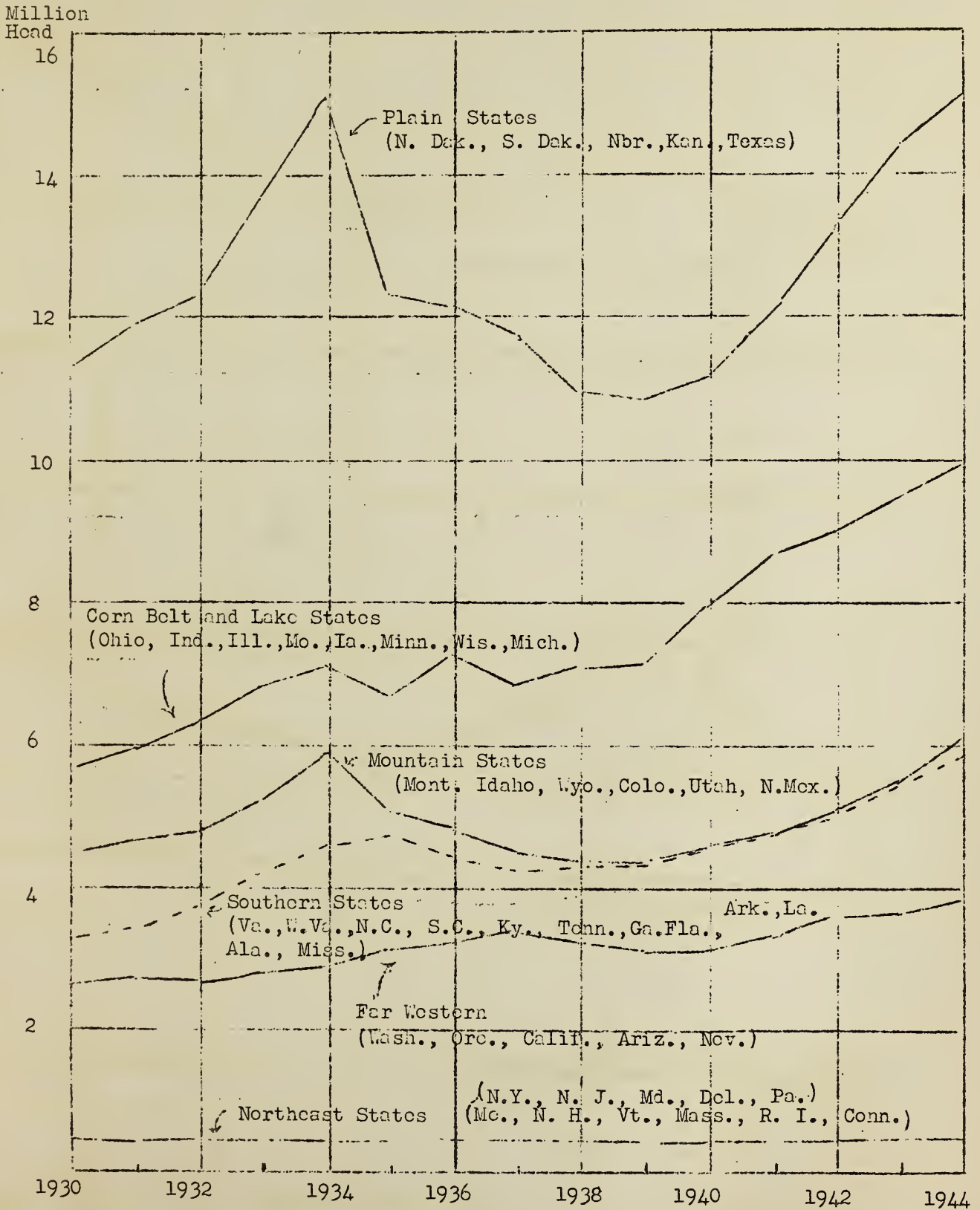


Fig. 5. Numbers of Milk Cattle, by Regions, January 1, 1930-1944  
(Milk Cattle Includes Cows Kept for Milk and Heifers

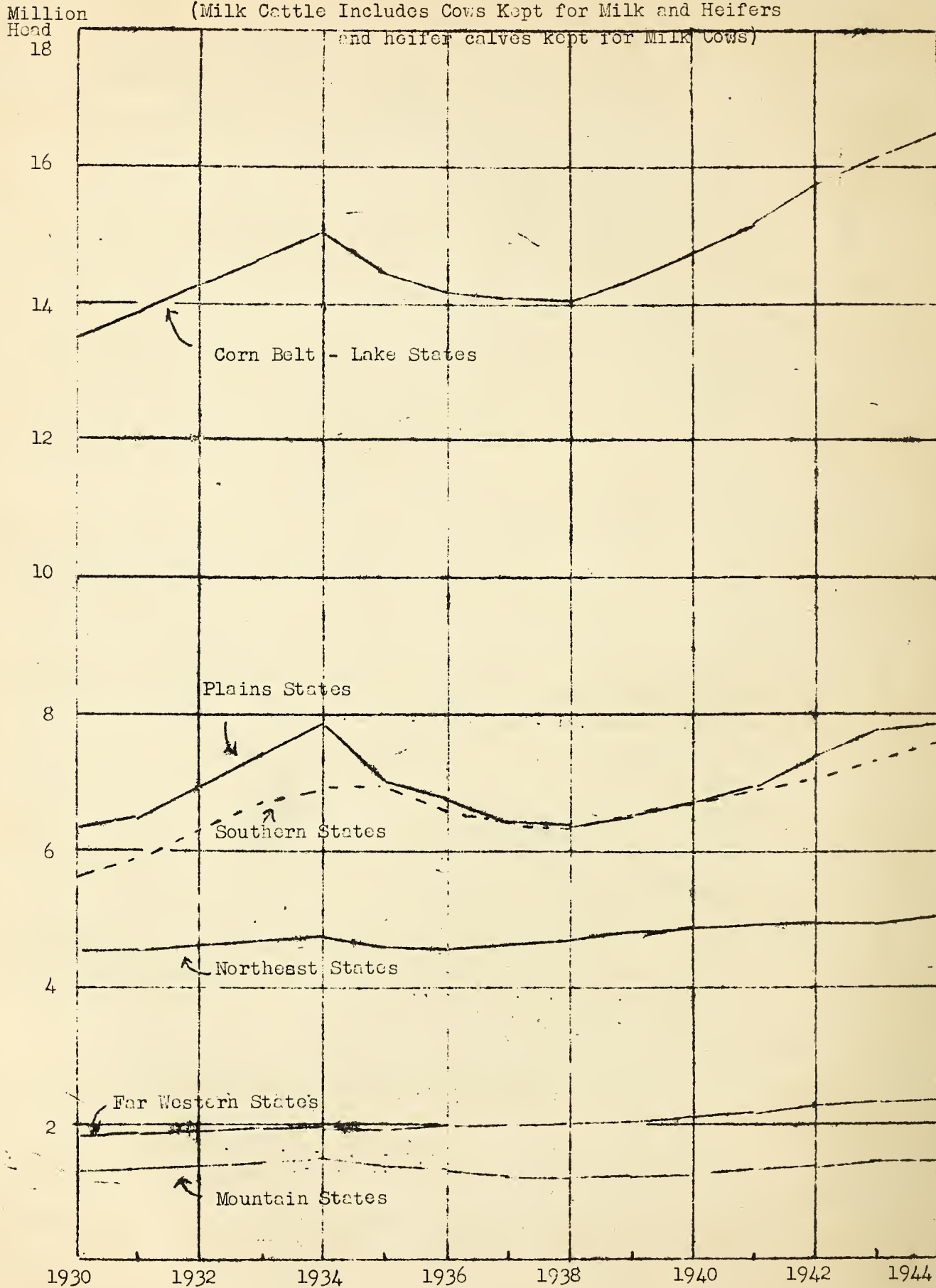




Fig. 6. Cattle Numbers Jan. 1 as Percent of 1930-44 Average

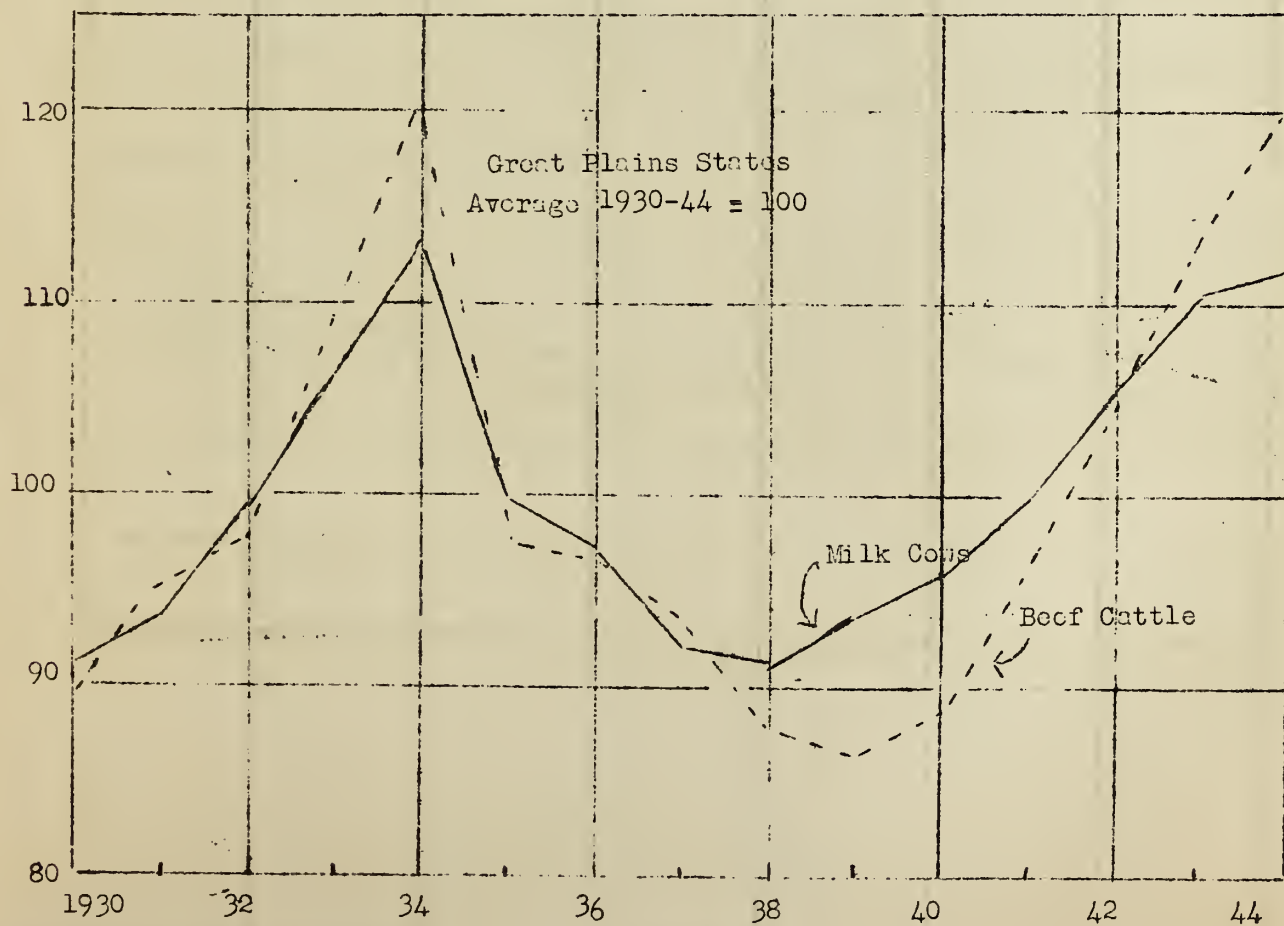
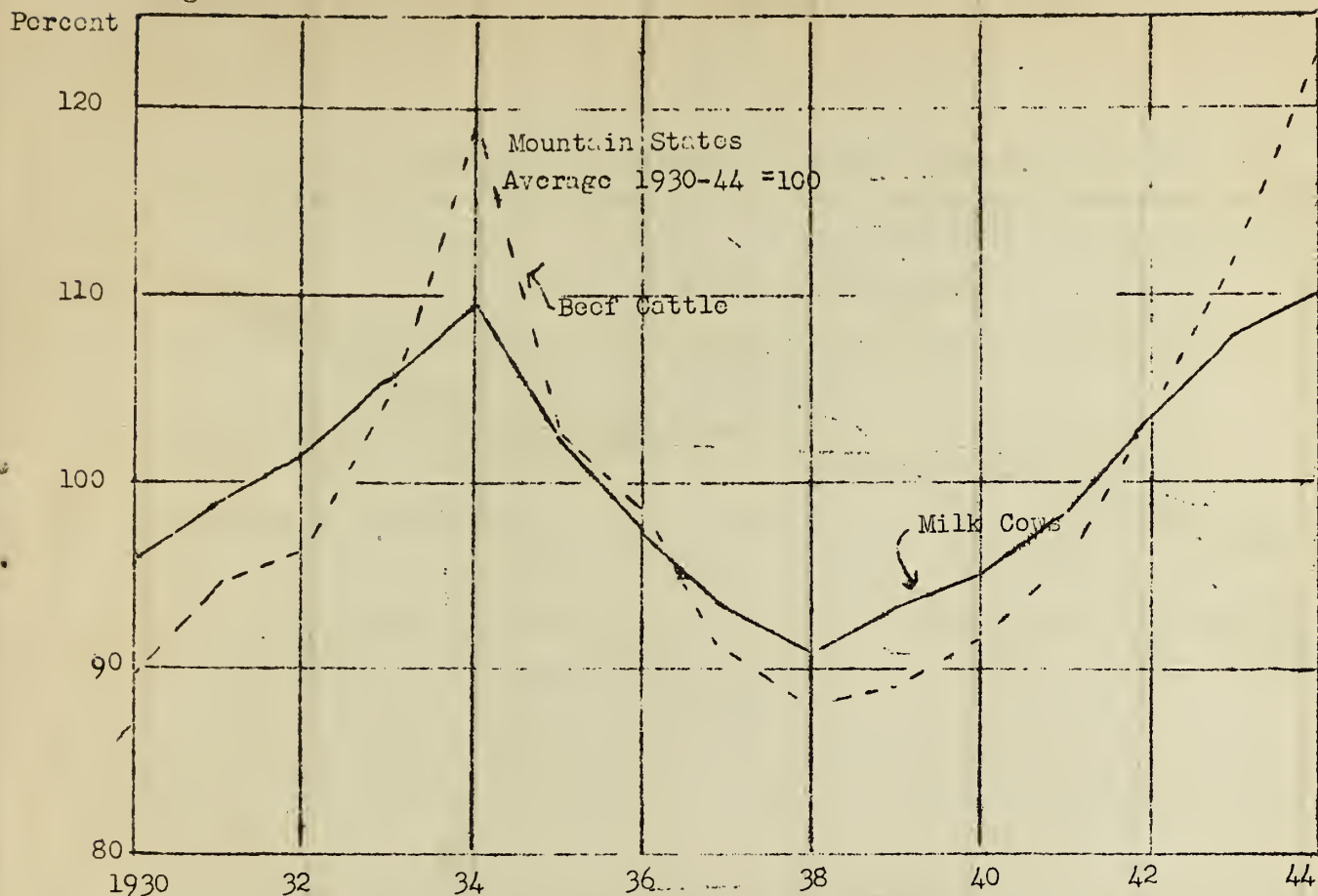


Fig. 7. Cattle Numbers January 1 as Percent of 1930-44 Average

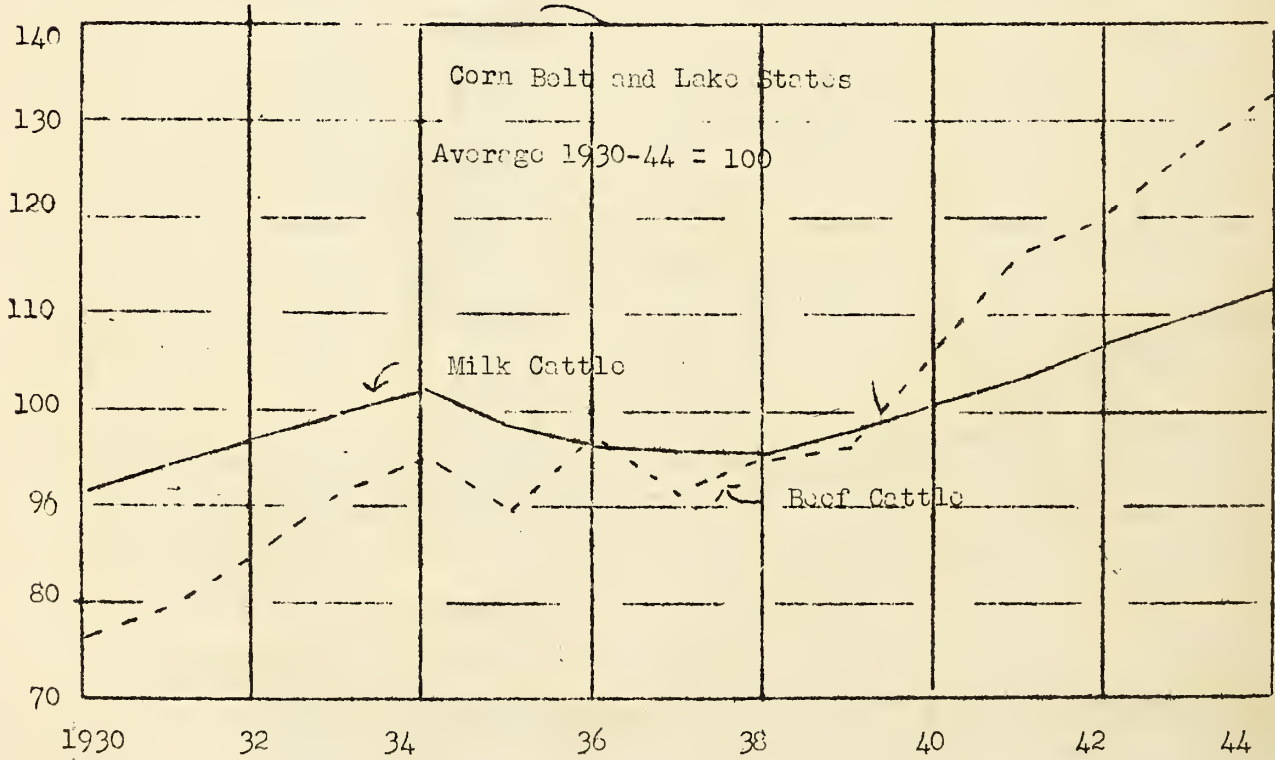
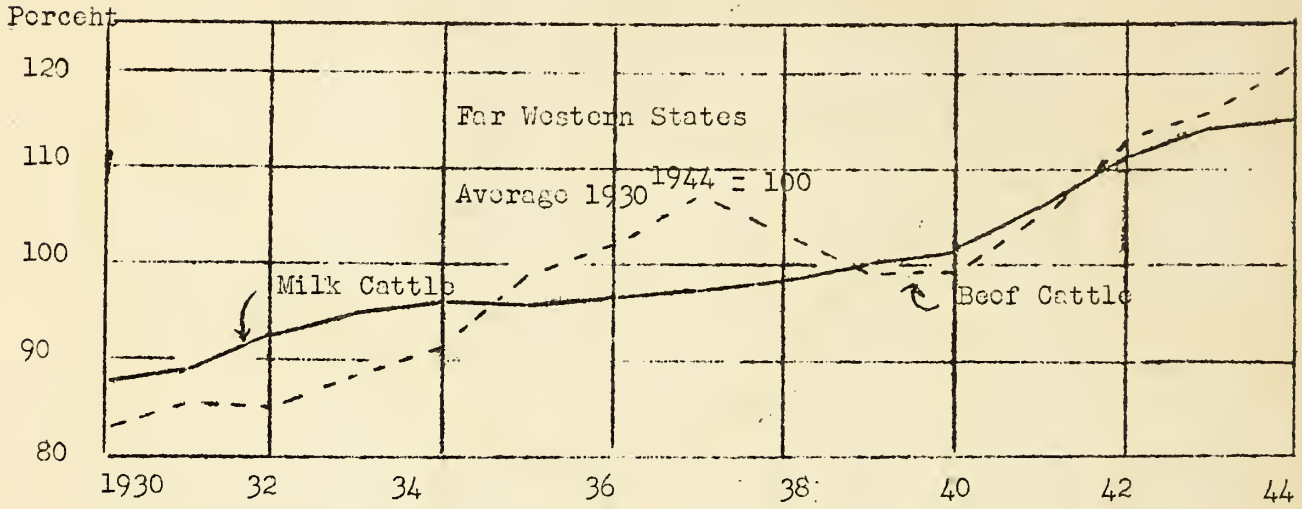
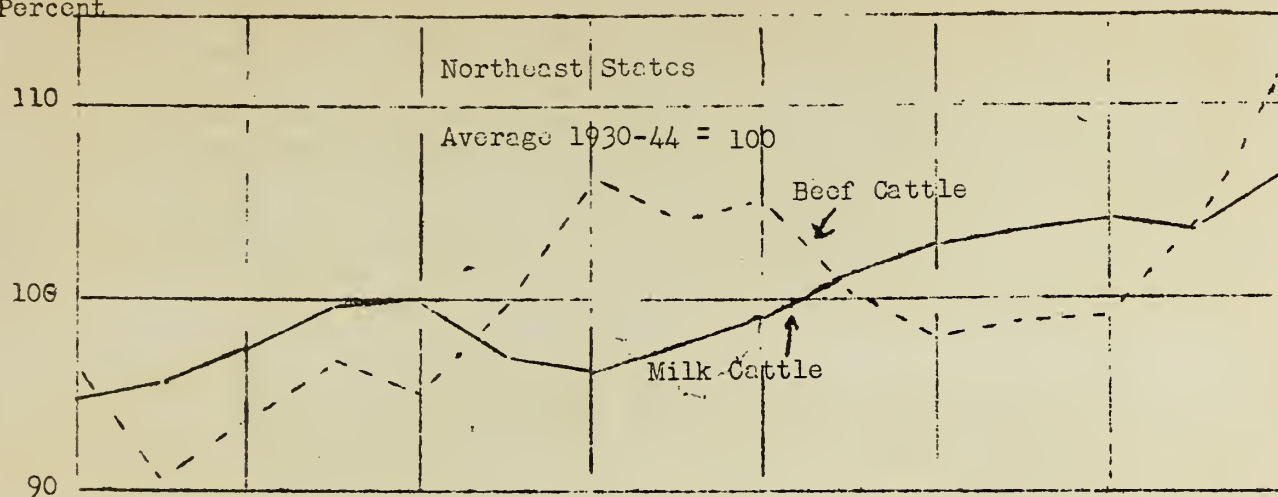
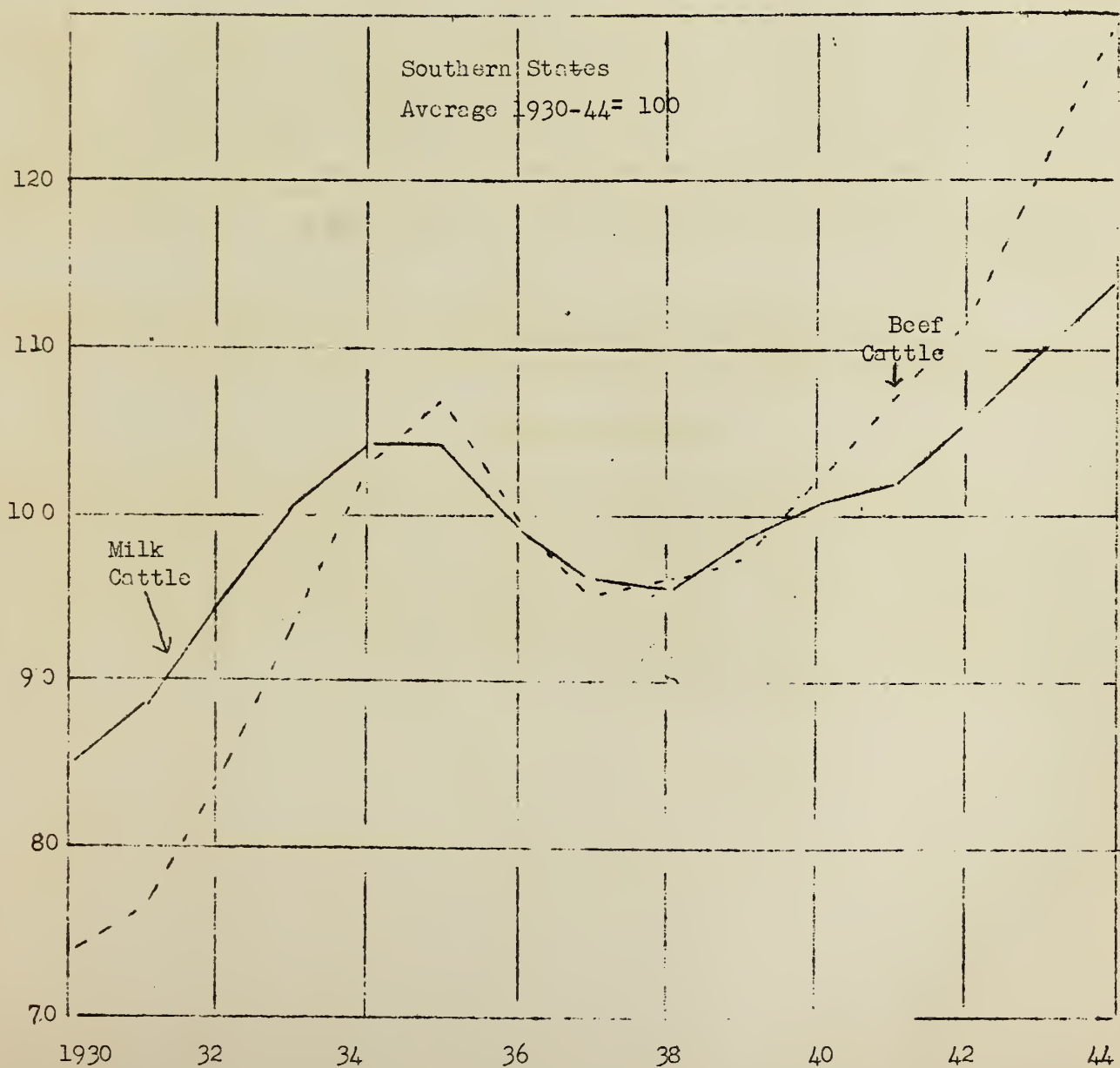


Fig. 8 Cattle Numbers Jan. 1 as Percent of 1930-44 Average

Percent



CATTLE AND CALVES ON FARMS JANUARY 1



In the North Central States east of the Missouri River where about one-third of the cattle are produced, it will be necessary to adjust the number of cattle to a smaller acreage of pasture. As indicated in the lower section of Figure 7, the number of beef cattle has increased rapidly in these States since 1939. On the other hand, the acreage of pasture was reduced about 1.4 million acres from 1942 to 1943, and if the goal acreage of feed grains and soybeans is attained in 1944 a further reduction in pasture of about 2 million acres will be necessary. Adjustments both in pasture acreage and cattle numbers should be greatest in Iowa, Indiana and Illinois. The number of cattle in Michigan increased 28 percent from 1934 to 1944, and considerable reduction is suggested by the Michigan Committee.

In the Corn Belt, the wartime production problem as it affects beef cattle is to reduce the acreage used for pasture and hay in order to grow the maximum acreage of high-yielding crops and to obtain as large an output of beef with feeds which do not have a higher use value for other classes of livestock. A reduction in the supply of hay for beef cattle can be offset in part by larger use of such feeds as corn stalks, silage, and oats straw.

About 17 percent of all cattle and calves are in the Southern States, excluding Texas and Oklahoma. The number of cattle in the South has increased steadily during the last several years. But a considerable part of the increase in many parts of that area has been based on an improving local forage feed situation, which has not been greatly affected by the wartime crop production program. Additional quantities of peanut hay have been available for the peanut areas. Total beef output probably could be increased, however, by some reduction in numbers and the use of better feeding and other management practices on the smaller herds.

In the Northeastern States, where dairy cattle predominate, there should be a relatively large disposal of cull dairy cows as the large number of dairy heifers retained in 1942 and 1943 become available for replacements.

#### Slaughter Capacity

One of the problems to be considered in connection with increasing cattle slaughter under present war conditions is the potential capacity of slaughtering plants to handle increased supplies. During the winter of 1943-44, the operators of these plants for the first time were unable to slaughter all of the hogs pressing on the market. This was largely because of their inability to get sufficient labor, and in consequence, various methods had to be used to control hog marketings so as to eliminate congestion at plants and stockyards, and prevent excessive shrinkage and loss.



The largest monthly slaughter of cattle and calves in federally inspected plants for commercial distribution occurred in October 1942 when 1,247,000 cattle and 571,000 calves were slaughtered. In 1934 when the government cattle buying program was in operation, the combined total of government and commercial slaughter in these plants numbered 1,805,000 cattle and 884,000 calves in September, and 1,613,000 cattle and 990,000 calves in August. If these plants could maintain this rate of slaughter now, their total would be sufficient to handle a yearly total of 35 million head, provided it was distributed over the year in about the usual seasonal pattern. Conditions now because of the war, are greatly different than in 1934, and in view of the labor shortage these plants probably could not expand their operations to the maximum level reached in that year. Shifting the time of marketing so as to reduce the seasonal peak that occurs in October will lighten the burden on these plants and make it easier for them to handle larger numbers of cattle. This would necessitate marketing more than the usual proportion in the summer months when marketings of hogs are seasonally small.

### Transportation Facilities

A slaughter supply of 33 to 35 million cattle and calves probably can be transported to market this year if the seasonal distribution of marketing is more uniform than usual. The heaviest rail movement of livestock is in October when cattle and lambs are marketed from western ranges in largest numbers to feedlots for immediate slaughter. In 1943, the peak of railroad livestock loadings was 27,750 cars in the third week of October. The average weekly loadings for the 6-week period from October 1 to the middle of November was about 26,000 cars. It is doubtful if the railroads can handle much additional livestock at that time of the year, because stock cars probably would not be available and additional locomotives and labor could not be spared from other transportation requirements. The movement of livestock from western ranges necessitates the use of large numbers of stock cars because of the long hauls and the increased time required to return empty cars. The railroads are pooling their equipment to make it available where it is most needed. Railroads are in position to haul larger numbers of cattle during the spring and summer because the number of stock cars loaded per week during those seasons normally is about half as great as in October.

The trucking situation is becoming serious. In the Corn Belt States, the heaviest burden on trucks is in the fall and winter when hog marketings are heaviest. Until that time, trucks apparently will be available there even though cattle marketings increase considerably. In the range areas, some livestock is moved to market by truck, but the more extensive use of trucks is in the making of deliveries to local railroad shipping points. If there is a shortage of livestock trucks in those areas, in the fall when cattle and lambs are marketed in largest numbers, driving cattle to the local shipping point on foot will be more common.

Cattle Prices in World Wars I and II.

The cattle price pattern thus far in this war has been much like that in World War I (see Figure 9.) The chief differences in prices have been in the top prices paid for the higher grades of steers and in the average prices paid for cows, bulls, stockers and feeders, and the lower grades of slaughter steers. Although top prices for slaughter steers in this war have been below the maximum prices reached in the last war, prices of all the lower grades of cattle have averaged higher than at any time in that war or in the period immediately following. Stockers and feeder cattle also have averaged higher than in the previous war. The position of the cattle industry at the beginning of each war, both with respect to its number cycle and its price cycle, was quite similar. Numbers were beginning to increase from the low levels reached shortly prior thereto, and prices were near the top of their cycle. In the last war no price controls for either cattle or beef were attempted, whereas in this war controls have been applied through beef price ceilings and a price stabilization directive on live cattle.

When the present war started in 1939, cattle prices averaged slightly higher than in 1914 when World War I began. The slaughter steer average at Chicago was \$8.80 in July 1914, and \$9.09 in August 1939. In both years, prices advanced temporarily immediately after war was declared and then declined for a few months, the decline being partly seasonal. During the next four years the trend was generally upward, with occasional downward reactions interrupting the upward movement.

The rise in the last war was halted in the summer of 1918, a few months before the Armistice in November, and at that time the Chicago average for slaughter steers was about \$16 and the top price was \$18.75. The top, however, continued upward and reached \$20.50 in December. A year later, December 1919, there were sales up to \$21.50, the highest Chicago price of record, and in August 1919, the monthly average reached an all-time high of \$16.45. From then until December 1921, the trend was sharply downward, except for a brief violent upswing in June 1920. The drop in the average from its high point in 1919 to its low in 1921, amounted to \$9.25, or about 56 percent, and was the most severe price decline ever experienced by the cattle industry.

The price rise in the present war was halted in April 1943, at which time the Chicago monthly average had reached \$15.70 and the top \$17.95. Prices of all the lower grades of cattle were then at record high levels and there was a strong feeling of speculative optimism among most cattlemen that the rise would continue. "Black Market" operators in beef were very active, and prices of feeder grade cattle were being bid up sharply by those buyers and by those desiring cattle for spring pastures. About this time, wartime controls of slaughter operations, meat rationing, and meat prices became more effective and it was soon apparent that cattle prices were too high in relation to the ceiling prices that had been established for beef.

From April to December 1943, was a period of downward readjustment, with prices of feeder cattle and the lower grades of slaughter animals dropping sharply in contrast to a relatively moderate decline in the prices of the better grades of slaughter steers (see Figure 10). This resulted in a widening of the feeder margin which had become unusually narrow in the spring. During this period of readjustment there was much uncertainty among cattlemen as to the levels at which prices would stabilize and as to future trends in prices. Asking prices in the range country were generally above those bid, and relatively few buyers appeared at ranches and country points to make purchases in contrast to the very large number who were eager to buy in 1942. This situation, together with the uncertainties as to prospective feed supplies, resulted in fewer cattle being moved from the range areas and the markets to feedlots than in the fall of either 1941 or 1942. However, record numbers of cattle produced in the Corn Belt States were available there for feeding if desired; hence, the prospective supply of fed cattle in 1944 could not be fully determined on the basis of the movement into the area from elsewhere.

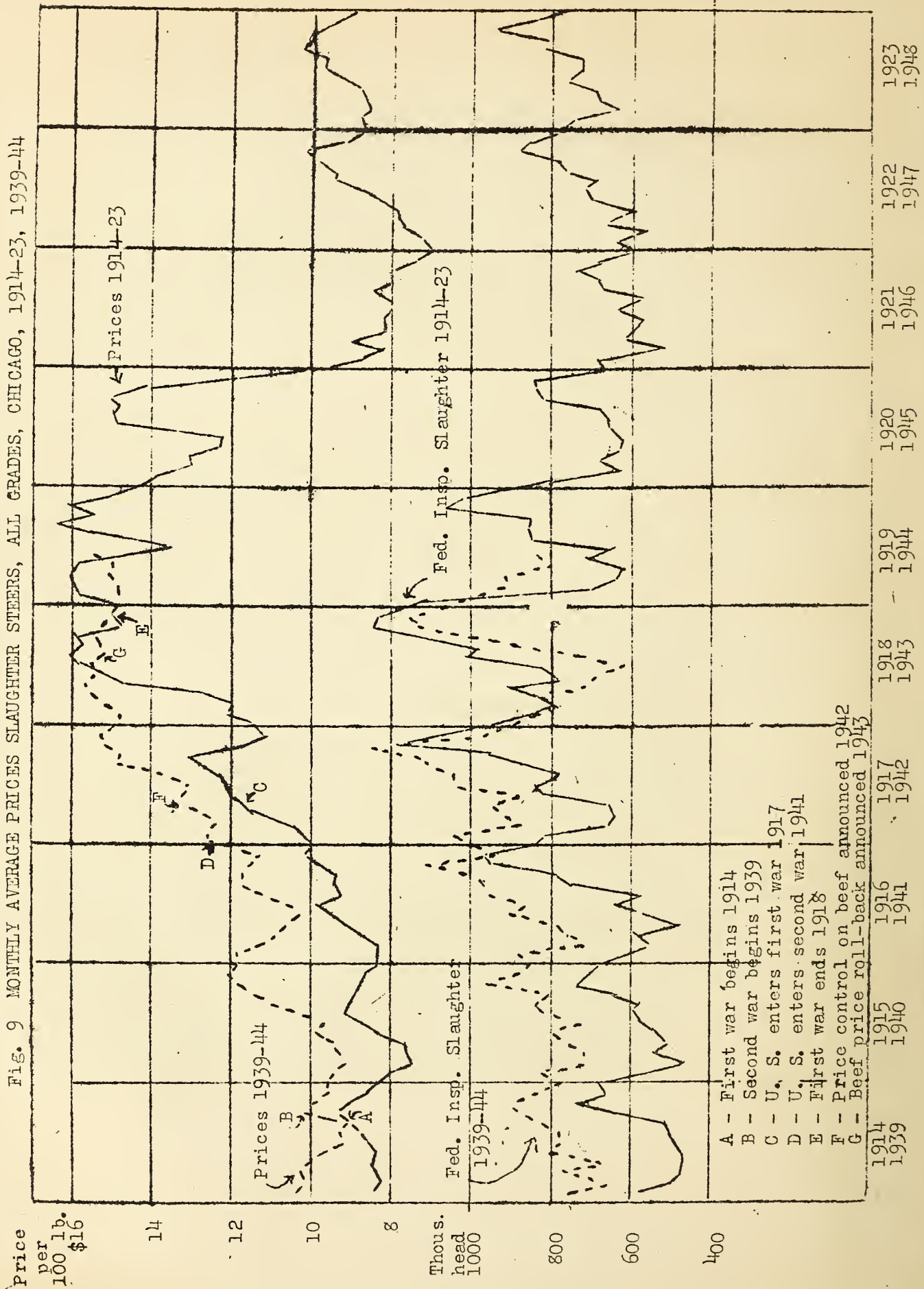
The decline in cattle prices in the last half of 1943 was checked near the end of the year at the close of the range cattle marketing season. Prices of the better grades of slaughter steers at the beginning of 1944 were at about the same level or slightly higher than a year earlier, but those of all other grades were considerably lower. From these levels prices of slaughter steers strengthened gradually, while prices of stocker and feeder cattle and of slaughter cows and heifers grading higher than canners rose almost as sharply as in early 1943, thus recovering much of the decline which occurred in the last half of that year. In early May all meats other than beef roasts and steaks were made point-free under rationing control. This action was followed by a further advance in cattle prices, but at the beginning of June, prices were still below the highest levels reached in the spring of last year.

#### Cattle Price Stabilization

The effort to stabilize cattle prices through subsidy payments to slaughterers in connection with the sale of beef has been an important development in the cattle situation in recent months. The cattle price directive of the Office of Economic Stabilization became effective in late December 1943. This directive provides for specified ranges in the monthly average prices to be paid for different grades of cattle by slaughterers who desire to become eligible for beef subsidy payments. The directive places no maximum or minimum limit on prices to be paid for individual animals or lots, but provides that the general average of prices for the month or the accounting period used, be held within a specified range. Compliance with the requirements of the directive are determined by comparing the amounts paid for all cattle in the period with the computed maximum and minimum amounts permitted, based on the proportions of the different grades of beef obtained from the cattle purchased. If the amount paid for the cattle exceeds the computed permissible maximum or is less than the computed permissible minimum, the differences are deducted from the subsidy payments that otherwise would be eligible to the slaughterer.

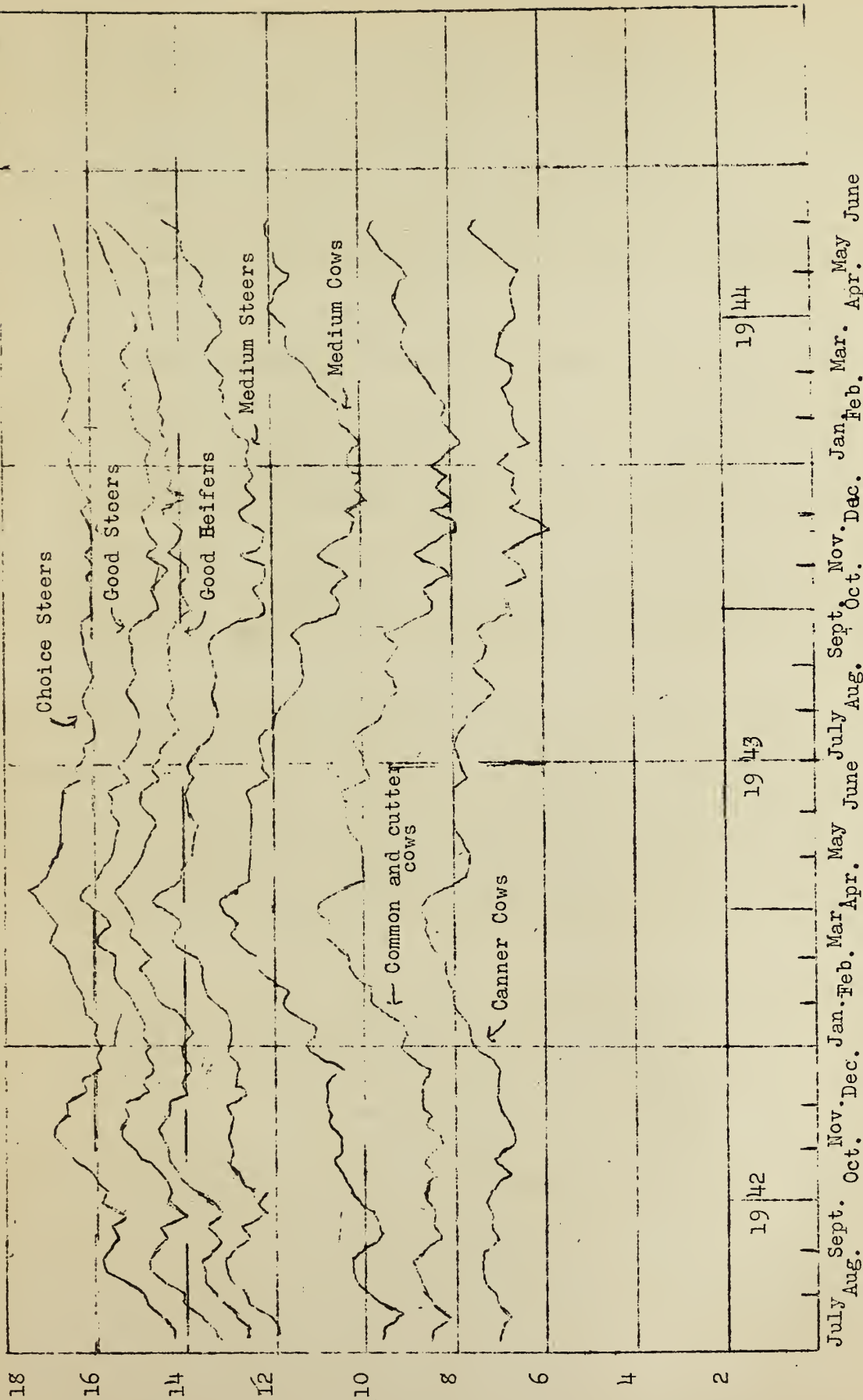


Fig. 9 MONTHLY AVERAGE PRICES SLAUGHTER STEERS, ALL GRADES, CHICAGO, 1914-23, 1939-44





Dollars Fig. 10 Weekly Average Price Slaughter Cattle Chicago, July 1942, -May 1944



The plan has not been in operation long enough to appraise fully its effectiveness in stabilizing prices. Its effectiveness in preventing declines is dependent on the continuance of a high level of civilian and military demand for beef and also on the ability of slaughtering plants to handle all the cattle that come to market for slaughter. If beef supplies should be excessive for the existing demand, beef prices would have to be lowered to move them. Cattle prices in turn would decline sufficiently to reflect the reduction in beef prices, regardless of the subsidy payments available to packers for complying with the directive. Likewise, if cattle marketings at any time should prove to be in excess of slaughtering capacity, bids for cattle would be lowered because of the reduced competition, and the drop in prices might exceed the amount of the subsidy available.

#### The Relation of Cattle Price Changes to the Feeder Margins

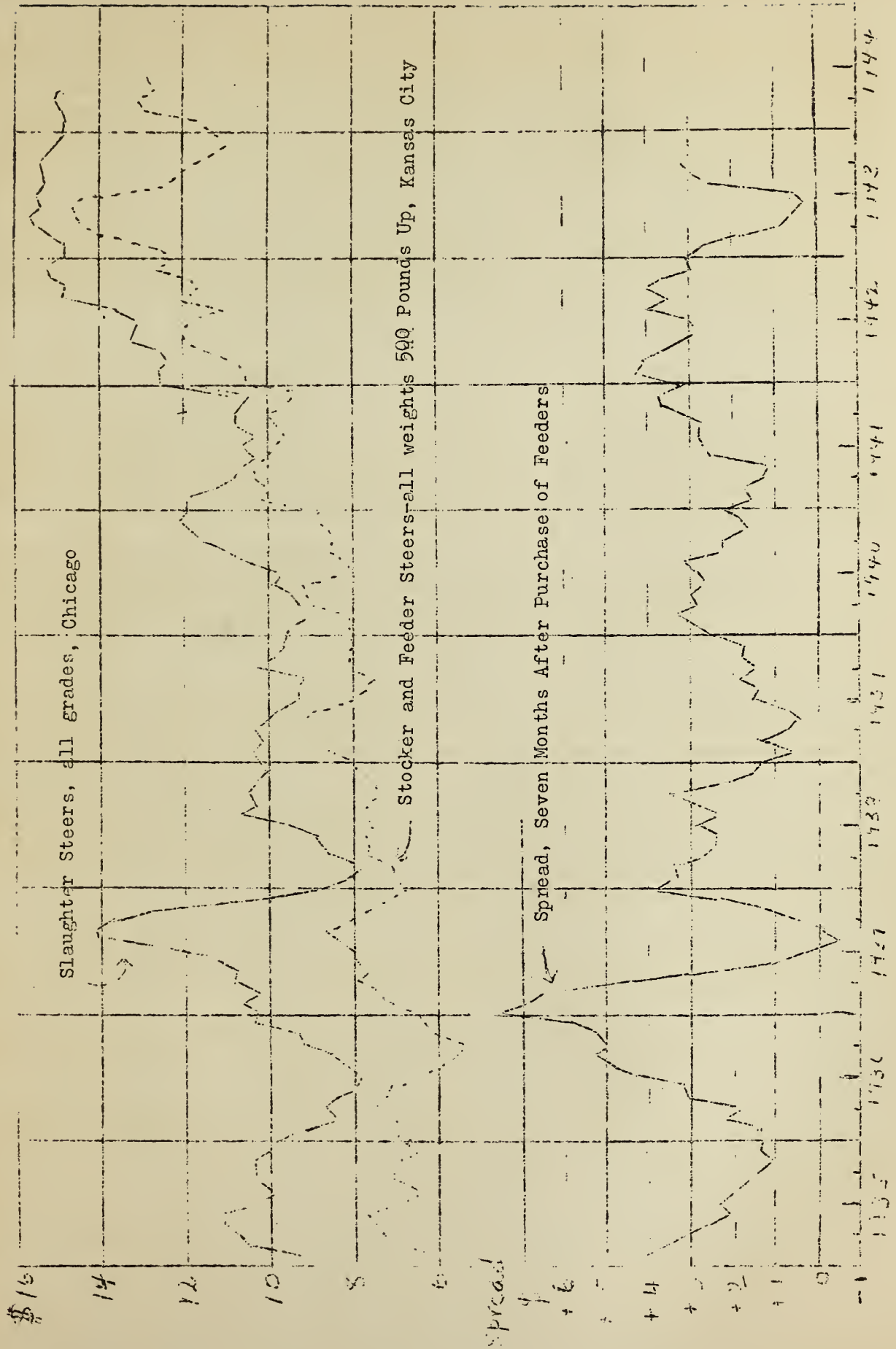
Normal operations of the cattle industry is to move large numbers of cattle, mostly beef calves, steers, and heifers, from the range to feed lots for further fattening on grains and other concentrates before slaughter. Probably 175 to 225 million bushels of corn are used annually in cattle feeding operations in which roughly about 1.5 billion pounds liveweight are gained by the cattle fed.

Profits from cattle feeding are determined largely by the cost of the feed used and the margin or spread between the prices paid for feeder animals and the prices received when sold later for slaughter. Feed costs in the 1943-44 season have been about double those in 1940-41 but only about three-fourths as great as in World War I.

The margin or spread is of special significance to cattle feeders, not only because it determines their profits and losses but also because it is so extremely variable and they have no control over it once cattle are started on feed, other than to modify or change their feeding practices. Since there is a considerable period of time between the date cattle are bought as feeders and when they are later sold for slaughter, usually ranging from two to twelve months, any price changes that occur during this interval will affect this spread. A sharp price rise during this interval will result in larger than average profits for the finisher, whereas, conversely a marked decline after purchase will greatly reduce them and may result in heavy losses.

The possibility of rapid price changes after feeder cattle are bought and before they are sold for slaughter injects a great deal of speculative risk in all cattle feeding operations and is one of the factors which cattle feeders must consider in making their plans. The extent to which price changes have affected the cattle feeders' margin in the last 10 years is shown in Chart 11. In this chart the spread shown represents the difference between the monthly average price of feeder steers at Kansas City and the average price of slaughter steers at Chicago seven months later. The sharp rise in prices of fed cattle in 1937 following the drought of 1936 resulted in a very wide margin on feeder cattle bought in the fall of 1936 when prices were relatively low. In the spring and summer of 1937 prices of feeder stock moved up with the rise in slaughter cattle prices, but when the feeder cattle bought during these months were sold later all prices had then dropped sharply, with the result that the margin obtained was either very small or a minus quantity.

Fig. 11 Monthly Average Prices, Slaughter Steers, Chicago, and Feeder Steers, Kansas City, 1935-1944





The long rise in cattle prices from June 1940 to April 1943 enabled cattle finishers to obtain a relatively wide margin on all feeder stock bought during all but the last few months of the period. When the rise was halted, the average price of feeder cattle was then only slightly below the average for slaughter stock, and when the price of the latter declined, the margin on feeders bought near the top of the rise was rapidly reduced, thus resulting in losses or little gains to the finisher.

If prices of slaughter cattle can be maintained at a fairly stable level, the feeder margin then tends to become fixed and finishers know at the time they make their feeder purchases the approximate margin they may expect to get when they sell their cattle for slaughter.

#### - SUMMARY -

Cattle numbers, now totaling 82.2 million head, have increased by 17 million head since 1938 and are now the largest of record. They exceed the 1937-41 average by 22 percent and appear to be excessive for feed and pasture resources, especially if conditions should become unfavorable because of drought.

In the fall of 1943, State Agricultural Goal Committees recommended reductions in cattle numbers that would bring the national total to about 77 million head by the end of 1944. To achieve this reduction would require a total slaughter of about 36.5 million cattle and calves, or 9 million more than in 1943. Since this number appears to be in excess of the capacity of available slaughter facilities, a slaughter goal of not to exceed 35.5 million head appears to be the maximum that might be realized. Slaughter during the first 5 months was at a rate indicating a yearly total of 31 to 32 million head. This level of slaughter would check the upward trend in cattle numbers, and any increase above it would be reflected in a decrease in numbers.

Increasing cattle slaughter will require slaughtering a much larger proportion of cows and heifers than in recent years, since three-fourths of the increase in numbers since 1938 has been in she-stock. Cows and heifers are generally marketed in largest numbers during the fall months.

Increased marketings of cattle during the summer would tend to prevent possible congestion of supplies at markets during the fall and make it possible for slaughtering plants to handle larger numbers.

The cattle price pattern in this war has been much like that of World War I. Prices of the better grades have not reached as high levels as in the previous war but those of the lower grades have averaged higher.

The cattle feeding margin was relatively favorable during 1940 and from June 1941 to early 1943, when it became unfavorable. It again became favorable in early 1944.



TABLE 2

CATTLE ON FARMS, JANUARY 1: ESTIMATED NUMBER, BY REGIONS  
1930 - 1944

- 23 -

YEAR	5 Far Western States <sup>1/</sup>		6 Mountain States <sup>2/</sup>		6 Plains States <sup>3/</sup>		17 Western States		8 Corn Belt Lake States <sup>4/</sup>	
	Milk Cattle	Beef Cattle	Milk Cattle	Beef Cattle	Milk Cattle	Beef Cattle	Milk Cattle	Beef Cattle	Milk Cattle	Beef Cattle
T H O U S A N D S      O F      H E A D										
1930	1,813	2,635	1,291	4,446	6,384	11,302	9,488	18,383	13,472	5,700
31	1,860	2,713	1,326	4,638	6,527	11,877	9,713	19,228	13,846	5,920
32	1,915	2,701	1,365	4,758	6,938	12,328	10,218	19,787	14,248	6,341
33	1,968	2,812	1,414	5,212	7,450	13,713	10,832	21,737	14,645	6,841
34	1,983	2,917	1,476	5,895	7,903	15,158	11,362	23,970	15,028	7,110
35	1,974	3,144	1,384	5,089	7,015	12,309	10,373	20,542	14,413	6,686
36	1,994	3,244	1,308	4,823	6,795	12,134	10,097	20,201	14,150	7,242
37	2,011	3,405	1,261	4,502	6,458	11,769	9,730	19,676	14,047	6,812
38	2,028	3,283	1,222	4,346	6,387	10,956	9,637	18,585	14,035	7,089
39	2,069	3,156	1,252	4,381	6,528	10,854	9,849	18,391	14,369	7,166
40	2,097	3,151	1,280	4,522	6,696	11,146	10,073	18,819	14,731	7,916
41	2,187	3,341	1,321	4,714	6,959	12,098	10,467	20,153	15,151	8,683
42	2,298	3,590	1,389	5,087	7,404	13,258	11,091	21,935	15,707	8,945
43	2,358	3,687	1,457	5,526	7,775	14,429	11,590	23,642	16,133	9,489
44	2,373	3,841	1,482	6,104	7,828	15,125	11,683	25,070	16,504	9,902

<sup>1/</sup> Washington, Oregon, California, Nevada, Arizona<sup>2/</sup> Idaho, Montana, Wyoming, Colorado, Utah, New Mexico<sup>3/</sup> North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, Texas<sup>4/</sup> Minnesota, Iowa, Missouri and 5 East Northcentral States

YEAR	11 Northeast States <sup>5/</sup>		12 Southern States <sup>6/</sup>		31 Eastern States		United States Totals	
	Milk Cattle	Beef Cattle	Milk Cattle	Beef Cattle	Milk Cattle	Beef Cattle	Milk Cattle	Beef Cattle
T H O U S A N D S      O F      H E A D								
1930	4,534	455	5,660	3,311	23,666	9,466	33,154	27,849
31	4,569	428	5,905	3,421	24,320	9,769	34,033	28,997
32	4,663	441	6,320	3,752	25,231	10,534	35,449	30,321
33	4,762	458	6,712	4,227	26,119	11,526	36,951	33,263
34	4,784	449	6,940	4,619	26,752	12,178	38,114	36,148
35	4,636	472	6,935	4,789	25,984	11,947	36,357	32,489
36	4,602	503	6,603	4,449	25,355	12,194	35,452	32,395
37	4,675	492	6,401	4,265	25,123	11,569	34,853	31,245
38	4,731	497	6,371	4,304	25,137	11,890	34,774	30,475
39	4,840	474	6,568	4,372	25,777	12,012	35,626	30,403
40	4,910	463	6,698	4,587	26,339	12,966	36,412	31,785
41	4,953	467	6,786	4,801	26,890	13,951	37,357	34,104
42	4,981	468	7,033	5,002	27,721	14,415	38,812	36,350
43	4,956	491	7,354	5,459	28,443	15,439	40,033	39,081
44	5,082	527	7,599	5,825	29,185	16,254	40,868	41,824

<sup>5/</sup> New England, New York, New Jersey, Pennsylvania, Delaware, and Maryland<sup>6/</sup> Arkansas, Louisiana, and all States south of Ohio and Potomac Rivers

